

REMARKS

In response to the rejections cited by the Examiner, the Applicants have restored the amended description of the specification on page 37, line 3 to the original recitation. This renders moot the rejection under U.S.C. § 132, cited by the Examiner in section 3 of the Office Action.

The specification has been amended on pg 20, beginning on line 22, to add to the description of the outer electrode and it's relation to high frequency power. Additionally reference to an apparatus in which high frequency power is imparted to respective divided outer electrodes has been deleted. This renders moot the rejection of claims 4-5, 8-11 & 20-23 under 35 U.S.C. § 112, first paragraph, as cited by the Examiner in section 5 of the Office Action.

In response to the rejections cited by the Examiner, claim 15, 19, and 24-29 have been canceled. The cancellation of these claims renders moot the rejection under U.S.C. § 132, as cited by the Examiner in section 2 of the Office Action. The cancellation of these claims also renders moot the rejection under U.S.C. § 112, first paragraph, as cited by the Examiner in section 4 of the Office Action. Specifically, the cancellation of claims 19, 27 and 29 renders moot the rejection under 35 U.S.C. § 102(b) or 103(a) over Tomaswick et al. (U.S. Patent No. 4,809,876), as cited by the Examiner in section 13 of the Office Action. Furthermore, cancellation of claims 15, 19, and 24-29 renders moot the rejection under 35 U.S.C. § 112, second paragraph, as cited in section 14 of the Office Action.

In response the rejections cited by the Examiner, Applicants have amended the claims. Specifically, in claims 4, 5, 9, 10 and 22, claim term “an insulator or resistive or capacitive elements” have been amended to read only “resistive or capacitive element.” The same change in language applies to claim 8 except that “element” is singular, not plural.

Claims 4, 5 and 8- 10 were amended to clarify that high frequency power is only applied to the first outer electrode. Specifically by adding the recitation “having a bottom portion, a body portion, and a shoulder portion...” To further clarify the claimed features, the following recitation was added to claims 4, 5, and 8 - 10 “ and seal the outer electrodes in such a manner that the electrodes are electrically isolated from each other.” Additionally,

claims 8 -10 also now recite the claim element “which also serves as a sealing material.” These disclosures are supported by the specification, *inter alia*, at page 13, line 24 to page 14 line 14 and page 17, line 16 to page 18, line 7. These amendments to the claims renders moot the rejection under 35 U.S.C. § 112, first paragraph, as cited by the Examiner in sections 5, 7 and 8 of the Office Action.

Claim 11 was amended to add a recitation of “by capacitive coupling.” This renders moot the rejection under 37 C.F.R. 1.75 ©), as cited by the Examiner in section 9 of the Office Action. This amendment also renders moot the Examiner’s rejection of claim 11 under 35 U.S.C. §103(a), as cited by the Examiner in section 12 of the Office Action. The claim now clearly recites that the electrodes, with the exception of the first one, can not be powered by any means, but must be powered by capacitive coupling.

Claim 22 was also amended to no longer depend from claim 20. This renders moot the rejection under 37 C.F.R. 1.75©), as cited by the Examiner in section 9 of the Office Action.

Claim 30-33 have been added. Claims 30 and 31 include limitations based on the data in Test 8 of Table 6 only. Claim 32 includes recitations based on the data in Test 9-10 of Table 6 and test 11-12 of Table 7. Claim 33 claims a product produced by the claimed production method.

In the Office Action, the Examiner has rejected claims 4-5 & 9-11 under 35 U.S.C. 103(a) as being unpatentable over Shimamura (JP 10-226,884), in view of Zenitani Toshihiro et al. (JP 11-256,331). Applicants has made amendments that add recitations which make clear the specific use of capacitive or resistive elements interposed between each of the electrodes. The specific function of the capacitive or resistive elements is to isolate the outer electrodes from one another. The amended claims now make it clear that the outer electrodes have no contact with one another. As such, there are interspaces between each of the outer electrodes. In all instances, except for the first outer electrode, high frequency power is transmitted to the electrodes by capacitive coupling. As a result, the present invention, according to claims 4, 5 or 9-11, is patently distinct from the prior art disclosures of Shimamura (JP 10-226,884), in view of Zenitani Toshihiro et al. (JP 11-256,331).

Additionally, the present invention would not have been obvious in light of the prior art disclosures, since there no longer is sufficient disclosure to warrant combining the references. This renders moot the rejection cited in section 11 of the Office Action.

Applicants have added claim 30-33 to replace claims 19, 27 and 29. The Examiner rejected those claims under 35 U.S.C. § 103(a) on the basis that Tomaswick et al. (U.S. Patent No. 4,809,876), and the rejected claims had overlapping density ranges. Claims 30-33 have density requirements that are distinct from the cited prior art. See Test 8, Test 9-10, 11-12, of Tables 6 and 7. Additionally, if the atomic hydrogen % overlapped with the prior art, the DLC films that have different density values can be construed as different films. As such the prior art reference does not cover the scope and content of the present invention. See Test Results, page 13, Remarks section of the September 1, 2005 response to the March 5, 2005 Office Action. Additionally, these new disclosures render moot the Examiner's rejection of claim 19, 27 and 29 due to obviousness type double patenting, found in section 15 of the Office Action.

The Applicants request clarification as to the documents cited in section 16 of the Office Action. Applicants respectfully points out that Application No. 10/452,208 does not possess claims numbered 6-17. The highest claim number is claim 5. Applicants bases this assertion on the information provided by the PTO website, current as of February 2, 2006. If this information is correct, the present inventions's claims can not be obvious, and the basis for rejection should be removed. Additionally, Applicants respectfully point out that Shimamura (WO 98/37259) is not a valid basis for making a provisional obviousness type double patenting rejection. Obviousness type double patenting rejections are only applicable when referencing U.S. Patent Documents. Applicants request that the rejection listed in section 16 of the Office Action be removed.

Conclusion

Based on the foregoing amendments and remarks, Applicants respectfully submits that the present claimed invention overcomes all presented rejections and is in condition for allowance. An early and favorable action is earnestly solicited.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'J. V. Costigan', with a stylized, flowing script.

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